Indiana Crop & Weather Report

INDIANA AGRICULTURAL STATISTICS
U.S. DEPARTMENT OF AGRICULTURE
PURDUE UNIVERSITY
1148 AGAD BLDG, ROOM 223
WEST LAFAYETTE IN 47907-1148
Phone (765)494-8371 (800)363-0469
FAX (765)494-4315 (800)363-0475

Released: Monday, 3PM April 27, 1998 Vol. 48, #4 West Lafayette, IN 47907

CROP REPORT FOR WEEK ENDING APRIL 26

Corn planting advanced and soybean planting got underway this past week according to the Indiana Agricultural Statistics Service. Farmers took advantage of dry weather late in the week before showers across much of the state on Saturday delayed activities once again. Farmers were able to return to the field on Sunday in many areas as rainfall amounts were light.

CORN AND SOYBEANS

Corn planting moved to 3 percent complete, well behind both last year and the 5-year average for this date. The best progress was made in the north central, northeast and west central districts. **Soybean planting** is also underway, with 1 percent of the crop in the ground. The best progress occurred in the west central district.

WINTER WHEAT

Eighty-six percent of the **winter wheat** acreage is **jointed**, compared to only 48 percent last year. By region, 76 percent is jointed in the north, 83 percent in the central, and 96 percent in the south. Five percent of the crop is **headed**, primarily in the southwestern corner of the state. Winter wheat **condition** is rated 85 percent good to excellent, compared to 63 percent at this time last year. The crop is beginning to show some signs of stress in the southern part of the state, where conditions have been the wettest.

OTHER CROPS

Pasture condition was rated 26 excellent, 54 percent good, 18 percent fair and 2 percent poor. There have been several reports of cattle being moved to grass.

DAYS SUITABLE and SOIL MOISTURE

For the week ending Friday, 1.8 days were rated **suitable for fieldwork**. **Topsoil moisture** was rated 1 percent short, 52 percent adequate and 47 percent surplus. **Subsoil moisture** was rated 1 percent short, 58 percent adequate and 41 percent surplus.

CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn Planted	3	NA	26	11
Soybeans Planted	1	NA	10	NA
Winter Wheat Jointed	86	70	48	39
Winter Wheat Headed	5	NA	0	0

CROP CONDITION

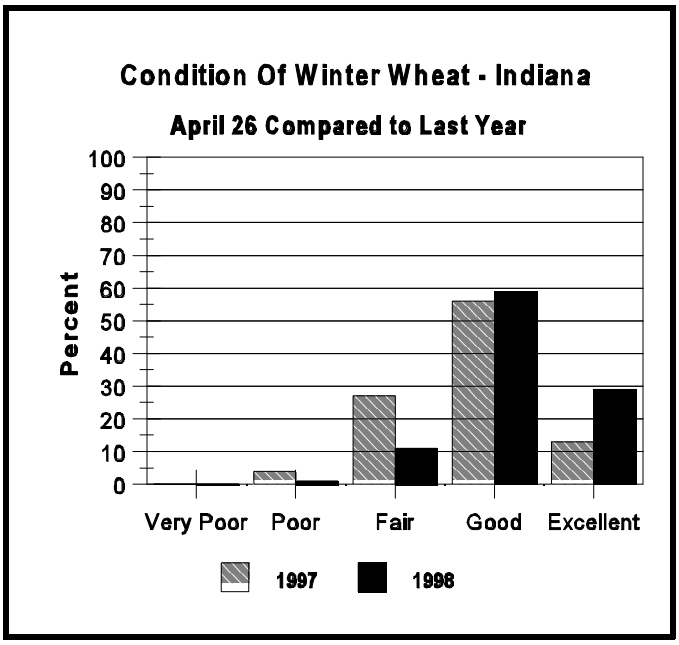
Crop	Very Poor	Poor	Fair	Good	Excel-lent
	Percent				
Winter Wheat 4/26	0	2	13	58	27
Winter Wheat 4/19	0	2	11	59	28
Winter Wheat 1997	2	7	28	54	9
Pasture	0	2	18	54	26

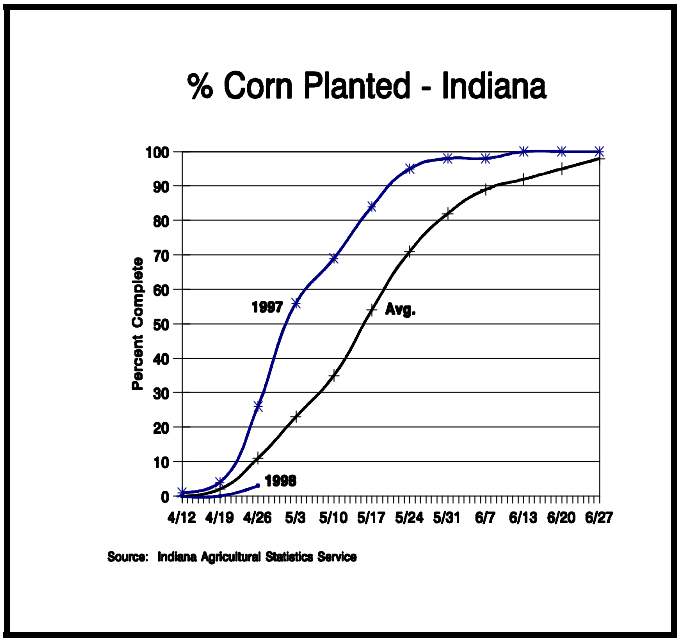
SOIL MOISTURE

	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	0	0	1
Short	1	0	9
Adequate	52	32	75
Surplus	47	68	15
Subsoil			
Very Short	0	0	0
Short	1	2	4
Adequate	58	50	78
Surplus	41	48	18

--Ralph W. Gann, State Statistician
--Lance Honig, Agricultural Statistician
E-Mail Address: nass-in@nass.usda.gov
http://info.aes.purdue.edu/agstat/nass.html

Crop Progress





Planter Issues Relative to Unusually Small Seed Corn

Some seed lots of some corn hybrids being delivered this spring are uncommonly small. The smallest I have seen is a 100,000 kernel bag that weighs 32 lbs. (equivalent to a 25-pound 80,000 kernel bag). This translates to about 3100 seeds per lb. or almost twice as small as what many farmers would prefer to plant. The accompanying article in the April 24 issue of Pest & Crop by Peter Thomison of Ohio State University, titled "Does Seed Corn Size Affect Hybrid Performance?", describes why seed size in and of itself should not be of concern relative to the potential yield of a given seed lot of hybrid corn. But, seed as small as mentioned above deserves some additional comments relative to planter adjustments and operation.

Most Obvious Consequence:

The most obvious consequence of a planting operation using such small seed will be a greater frequency of double or triple seed drops that result in seeding rates greater than what you anticipate for the transmission settings of the planter. At first glance you might worry about the plant stress resulting from such over-populations.

Interestingly enough, there are recent data from the University of Illinois (Nafziger, Emerson. 1996. Effects of Missing and Two-Plant Hills on Corn Grain Yield. J. Prod. Ag. 9:238-240) that suggest that the existence of a small frequency of doubles (about 10% of the stand) not only is NOT detrimental to corn yield, but may actually result in yield increases! The latter may be particularly true if your usual seeding rate is lower than it should be for your conditions. For more information on this research, contact Emerson Nafziger (Email: ednaf@uiuc.edu) at the University of Illinois.

Nonetheless, if you feel that your usual seeding rate is already "aggressive", there may well be negative side-effects of overpopulating due to doubles and triples. Hybrids with average or mediocre stalk health or strength may be more disposed to stalk lodging at higher than normal plant populations, especially if weather stress occurs during the season.

A less important, but potentially aggravating, consequence is that the unintentional overseeding of a field(s) due to double and triple seed drops will result in fewer acres planted per unit of seed. Over many acres, your planter hoppers may run empty before the end of the planting season if you do not realize how much seed you are running through the planter.

Finger-Pickup Style Seed Metering Units:

Several options exist for adjusting a finger-pickup style metering unit for such small seed sizes. First of all, replace the brushes that help remove double seed pickups. Secondly, the tension of the finger assemblies can be increased, but is best performed by planter service technicians. If you have the time, take a sample of the small seed plus your metering units to your dealer and ask them to fine tune the units to your seed. Be aware, however, that increasing the finger tension will also cause the whole planter drive system to operate a little harder and increase the odds for slippage of the drive tires. Double check the planter tire pressures and keep the starter fertilizer tanks full to ensure maximum ballast to prevent tire slippage.

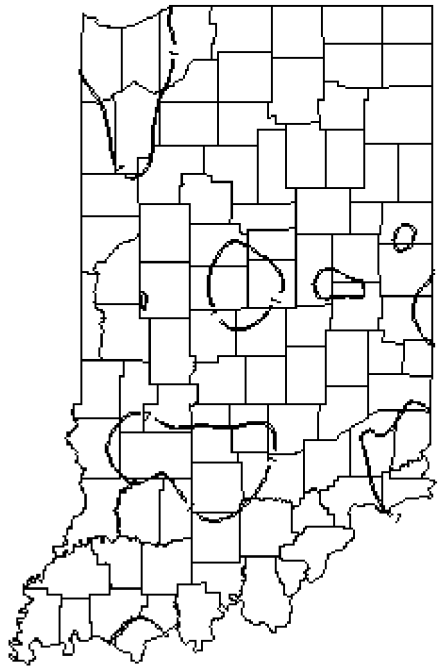
(Continued on Page 4.)

Average Daily Values for week ending Monday morning April 27, 1998

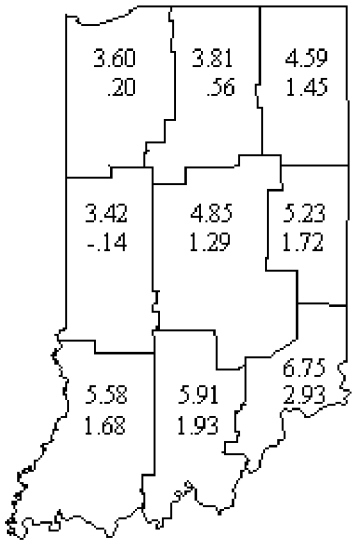
Area	Station	Air Temperature			Precipitation			Growing Degree Days		
		Max	Min	DN	Past Week	Since April 1	DN Since April 1	Past Week	Since April 1	DN Since April 1
NW	Wanatah	65	40	+1	.88	3.96	+.79	48	152	+56
	Kentland	67	44	+2	.24	3.16	+.17	55	180	+49
	Winamac	67	42	+1	.56	3.65	+.58	54	164	+31
NC	South Bend	63	42	+1	.31	2.98	-.21	43	140	+35
	Waterford Mills	69	42	+3	.20	2.63	-.25	60	170	+50
NE	Prairie Heights	66	43	+5	.13	3.61	+.68	52	165	+80
	Columbia City	65	43	+2	.16	4.03	+1.00	47	157	+46
	Fort Wayne	65	44	+2	.23	4.93	+2.08	47	162	+43
	Bluffton	67	44	+2	.13	4.99	+1.88	54	170	+37
WC	West Lafayette	69	45	+4	.31	2.86	-.24	59	182	+54
	Perrysville	69	45	+0	.35	2.99	-.62	59	195	-5
	Crawfordsville	68	40	+0	.35	3.60	+.56	56	192	+61
	Terre Haute 8s	70	47	+3	.33	4.13	+.81	65	229	+61
C	Tipton	66	43	+2	.83	4.08	+.81	50	164	+42
	Indianapolis	66	45	+0	.27	3.91	+.73	52	189	+24
	Indian Creek	68	45	+2	.29	4.58	+1.26	57	208	+41
EC	Farmland	67	43	+3	.41	4.67	+1.66	53	175	+58
	Liberty	67	44	+2	.54	5.31	+1.99	54	188	+16
SW	Vincennes	67	46	+0	.14	6.73	+3.36	54	218	+30
	Dubois	66	44	-2	.71	5.91	+2.27	52	213	+31
	Evansville	67	48	-2	.37	6.46	+2.95	56	225	+5
SC	Bedford	65	41	-2	1.69	10.09	+6.61	49	207	+26
	Louisville	67	49	-2	.88	5.30	+1.64	53	242	+24
SE	Butlerville	65	43	-4	.41	8.93	+5.41	48	207	-10

DN = departure from normal.
Growing Degree Days = daily mean - 50 (below 50 adjusted to 50, above 86 adjusted to 86.)

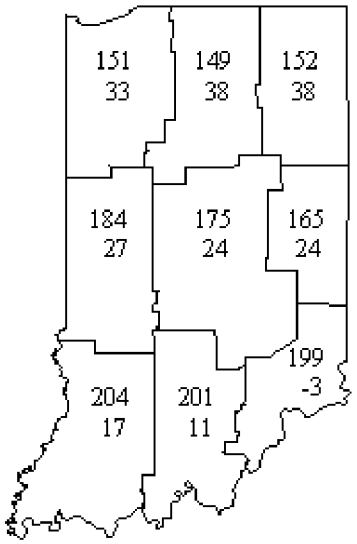
Rainfall of 1 Inch or More
for Past 7 Days
as of Monday morning



Rainfall for Past 4 Weeks
and Departure from Normal



Growing Degree Days
and Departure since April 1



The above information is provided by Ken Scheeringa, Indiana State Climatologist (765)494-8105
E-mail: kscheeringa@dept.agry.purdue.edu http://shadow.agry.purdue.edu

Planter Issues (continued)

Another option to deter double drops with excessively small seed is to slow the planting speed a little to allow the metering unit more time to eliminate doubles and triples. This may be especially valuable if your planting speed is on the excessive side anyway. Aim for maximum planting speeds no greater than five miles per hour.

For seed corn that approaches 3000 seeds per pound, you may want to consider purchasing popcorn/sunflower finger assemblies. Purchase of complete finger assemblies allows you to switch back to the normal finger assemblies rather easily when you plant more normal sized seed.

Vacuum or Air Seed Metering Units:

Most planters that utilize this type of pneumatic metering technology can be adjusted to accurately meter extreme seed sizes through prudent choice of both seed disc size (size of holes) and the system's air pressure. Case® planters utilize a pneumatic metering technology, but with a single metering unit (drum) that delivers seed to all the rows of the unit (two drums on larger planters). Adjustment for seed size with this planter is primarily by choice of drum size (no. and size of holes) and secondarily by modification of air pressure to the system. Study your planter manual carefully to determine how to manage unusual seed size. If the manual does not clearly outline these adjustments, contact your planter dealer.

Final Comments:

No matter what style of seed metering unit your planter uses, take the time to both 1) calibrate the planter to the seed size prior to planting and 2) check the actual seed placement regularly during the planting operation. Both activities are recommended every year, but may be especially important when faced with the challenge of uniformly seeding unusually small seed corn.

--Bob Nielsen , Agronomy Department , Purdue University

Acknowledgments: Thanks to Bruce Reynolds (Orville Redenbacher Popcorn) and Larry Cline (John Deere) for their suggestions regarding finger-pickup metering units.

The INDIANA CROP WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the Indiana Agricultural Statistics Service, Purdue University, 1148 AgAd Bldg, Rm 223, West Lafayette IN 47907-1148. Second Class postage paid at Lafayette IN. For information on subscribing, send request to above address. POSTMASTER: Send address change to the Indiana Agricultural Statistics Service, Purdue University, 1148 AgAd Bldg, Rm 223, West Lafayette IN 47907-1148.